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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/574,451	04/04/2006	Guofu Zhou	NL 031183	9329

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS
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EXAMINER	
MOY, ANNIE	
ART UNIT	PAPER NUMBER
4147	
MAIL DATE	DELIVERY MODE
12/17/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/574,451	ZHOU ET AL.	
	Examiner	Art Unit	
	ANNIE MOY	4147	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-11 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-11 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Robert Zehner (WO 03/044765 A2 "Zehner" hereinafter).

Regarding claim 1, Zehner discloses "An electrophoretic display panel (1), comprising: an electrophoretic medium (5) comprising charged particles (6);"(See page 2 lines 10-15 and page 3 lines 27-30); "a plurality of picture elements (2); electrodes (3,4) associated with each picture element (2)"(See page 8 lines 27- 31, i.e. it is inherent that the capsule that holds the charged particles contain electrodes); "for receiving a potential difference; and drive means (100), the drive means (100) being arranged for controlling the potential difference of each picture element (2) to be a reset potential difference having a reset value and a reset duration for enabling particles (6) to substantially occupy one of the extreme positions, and subsequently to be a grey scale potential difference for enabling the particles (6) to occupy the position corresponding to the image information, "(See page 45 lines 5-9, i.e. there is an erasing voltage that brings the particles to a black or white state. Another address signal is sent to bring the particles to a gray state); "wherein the drive means are further arranged for applying, at least for reset potential differences representing 50% or more of the maximum reset pulse energy, one or more pulses (Rp, SDp) having a voltage value of substantially less than the reset value in a time

period in between application of a reset potential difference and a grey scale potential difference of opposite sign." (See page 44 lines 27-29 and pages 45 lines 24-30, i.e. where "I" being the amplitude needed to change from white to black. There are blanking pulses that are +0.1I and -0.1I).

As for claim 2, in view of claim 1, Zehner discloses "An electrophoretic display panel as claimed in claim 1, wherein the drive means are arranged for arranged, for applying, for all reset potential differences one or more pulses having a voltage value of substantially less than the reset value in a time period in between application of a reset potential difference and a grey scale potential difference of opposite sign." (See page 44 lines 27-29 and pages 45 lines 24-30, i.e. where "I" being the amplitude needed to change from white to black. There are blanking pulses that are +0.1I and -0.1I).

As for claim 3, in view of claim 1, Zehner discloses "An electrophoretic display panel as claimed in claim 1, wherein the time period is at least one frame time." (See page 45/ lines 25-30, i.e. there are a couple of impulses being applied in the blanking period so there would be more than one frame time)

As for claim 4, in view of claim 1, Zehner discloses "An electrophoretic display panel as claimed in claim 1, characterized in that the device comprises means for applying in between the reset pulse and the grey scale potential difference one or more pulses with steadily reducing voltage value." (See page 45 lines 25-30, i.e. there are varying impulses that can be added. An example is shown in the reference so that they can go from "I" to +0.1I is decreasing voltage).

As for claim 5, in view of claim 1, Zehner discloses "An electrophoretic display panel as claimed in claim 1, wherein the device comprises means for applying in between the reset potential difference and the grey scale potential difference a rest pulse of zero voltage value." (See page 45 lines 26-30, i.e. where the blanking pulses do not have to be the same. The example given by the reference show the second pair has lower amplitude. It is inherent that one can decrease the pulse amplitude to zero when they can already decrease the voltages in the beginning).

As for claim 6, in view of claim 1, Zehner discloses "A An electrophoretic display panel as claimed in claim 4, wherein the device comprises means for applying in between the reset potential difference and the grey scale potential difference a rest pulse of zero voltage value for a period of at least 2 msec." (See page 45 lines 26-30, i.e. where the blanking pulses do not have to be the same. The example given by the reference show the second pair has lower amplitude. It is inherent that one can decrease the pulse amplitude to zero, when they can already decrease the voltages in the beginning. It is also inherent that a voltage is applied longer than 2 msec. long enough for the pulses to register).

Regarding claim 7, Zehner discloses "A method for driving an electrophoretic display device comprising: an electrophoretic medium (5) comprising charged particles (6); "(See page 1 lines 3-4 and page 2 lines 10-15 and page 3 lines 27-30); a plurality of picture elements (2), "(See page 8 lines 27- 31, i.e. it is inherent that the capsule that holds the charged particles contain electrodes); " in which method reset potential differences are applied to elements of the display device, prior to application of grey scale potential differences, wherein at least for reset potential differences representing 50% or more of the maximum reset pulse energy, one or more

pulses (Rp, SDp) having a voltage value of substantially less than the reset value are applied in a time period in between application of the reset potential difference and a grey scale potential difference of opposite sign. "(See page 45 lines 5-9 and page 44 lines 27-29 and pages 45 lines 24-30 i.e. the erase pulses are applied before the grey scale pulses. where "I" being the amplitude needed to change from white to black. There are blanking pulses that are +0.1I and -0.1I).

As for claim 8, in view of claim 7, Zehner discloses "A method as claimed in claim 7, wherein for all reset potential differences one or more pulses (Rp, SDp) having a voltage value of substantially less than the reset value are applied in a time period in between application of the reset potential difference and a grey scale potential difference of opposite sign"(See page 45 lines 5-9 and page 44 lines 27-29 and pages 45 lines 24-30 i.e. the erase pulses are applied before the grey scale pulses. where "I" being the amplitude needed to change from white to black. There are blanking pulses that are +0.1I and -0.1I).

As for claim 9, in view of claim 7, Zehner discloses "A method as claimed in claim 7, wherein one or more pulses (SDp) with steadily reducing voltage value are applied." (See page 45 lines 25-30, i.e. there are varying impulses that can be added. An example is shown in the reference so that they can go from "I" to +0.1I is decreasing voltage).

As for claim 10, in view of claim 7, Zehner discloses "A method as claimed in claim 7, wherein a rest pulse of zero voltage value is applied." (See page 45 lines 26-30, i.e. where the blanking pulses do not have to be the same. The example given by the reference show the second pair has lower amplitude. It is inherent that one can decrease the pulse amplitude to zero, when they can already decrease the voltages in the beginning).

As for claim 11, in view of claim 7, Zehner discloses "A method as claimed in claim 10, wherein the rest pulse of zero voltage is applied for a period of at least 2 msec." (See page 45 lines 26-30, i.e. where the blanking pulses do not have to be the same. The example given by the reference show the second pair has lower amplitude. It is inherent that one can decrease the pulse amplitude to zero, when they can already decrease the voltages in the beginning. It is also inherent that a voltage is applied longer than 2 msec. long enough for the pulses to register).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANNIE MOY whose telephone number is (571)270-7175. The examiner can normally be reached on Monday- Friday 8-4pm CT.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kieu-Oanh Bui can be reached on 571-272-7291. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/KIEU-OANH BUI/
Supervisory Patent Examiner, Art Unit 4147

ANNIE MOY
Examiner
Art Unit 4147